

## **ABSTRACT**

Disclosed is a method of forming a barrier metal in the semiconductor device. The method comprises the steps of a) patterning a porous film on a  
5 base layer to form a via hole, b) depositing a CVD TiN film on the entire structure including the via hole, c) implementing a plasma treatment process using  $N_2 + H_2$ , d) repeatedly implementing the steps (b) and (c) in order to bury only the pores formed on the surface of the porous film with CVD TiN, and e) forming a barrier metal on the entire structure including the via hole.  
10 Therefore, the present invention can prevent introduction of the conductive material into the base layer in a subsequent process.